STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

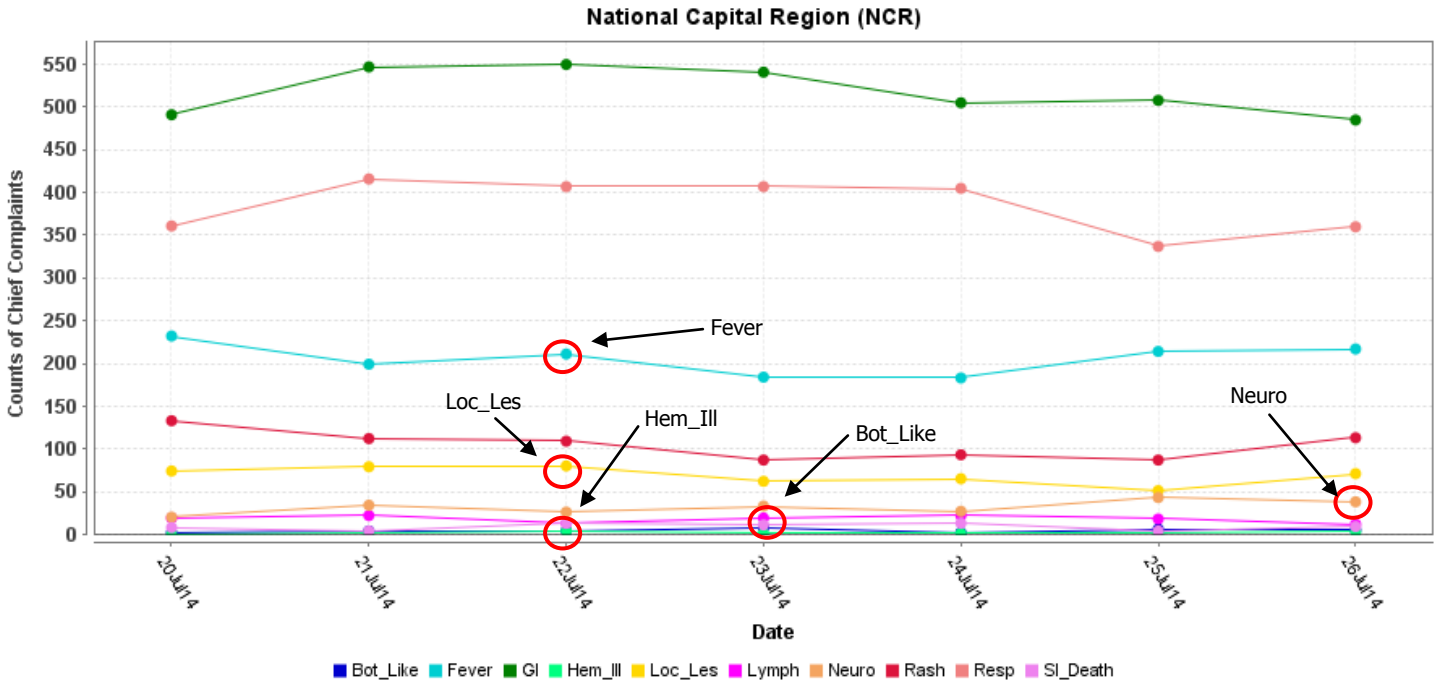
August 1, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:30
Reporting for the week ending 07/26/14 (MMWR Week #29)

CURRENT HOMELAND SECURITY THREAT LEVELS

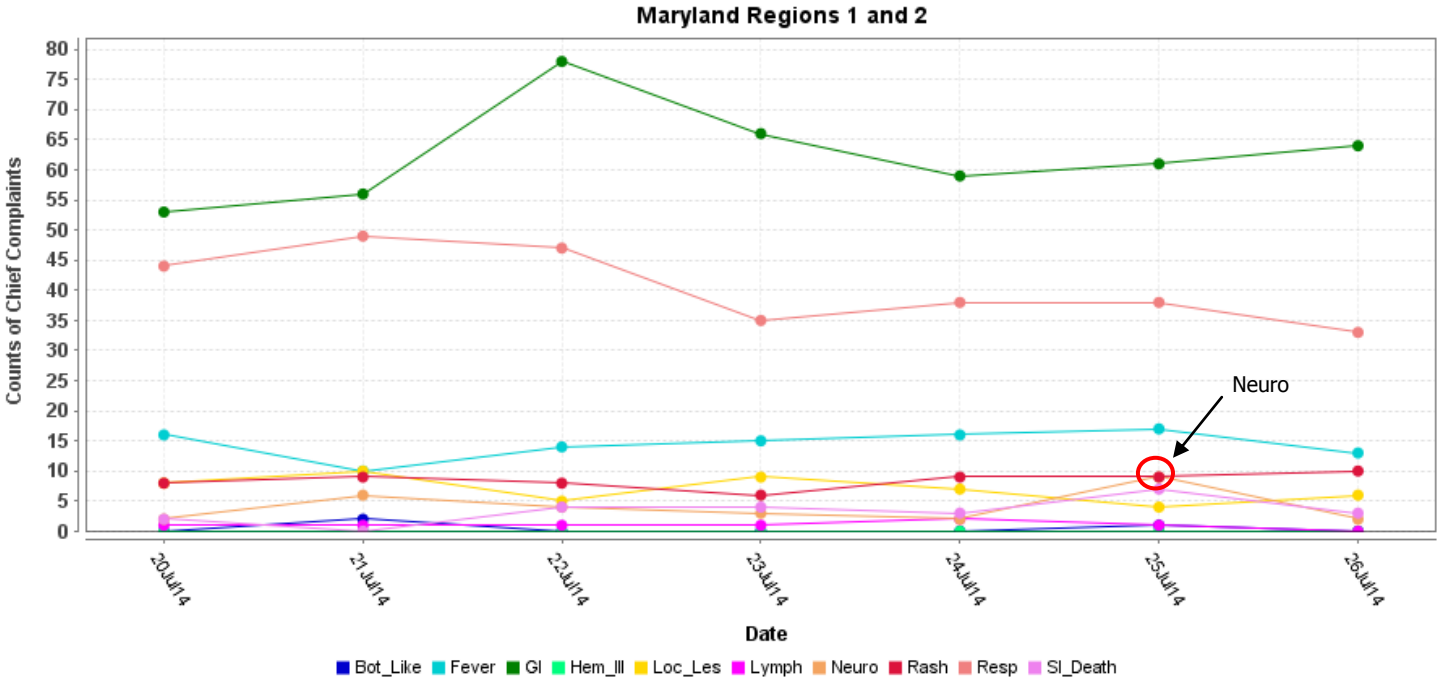
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

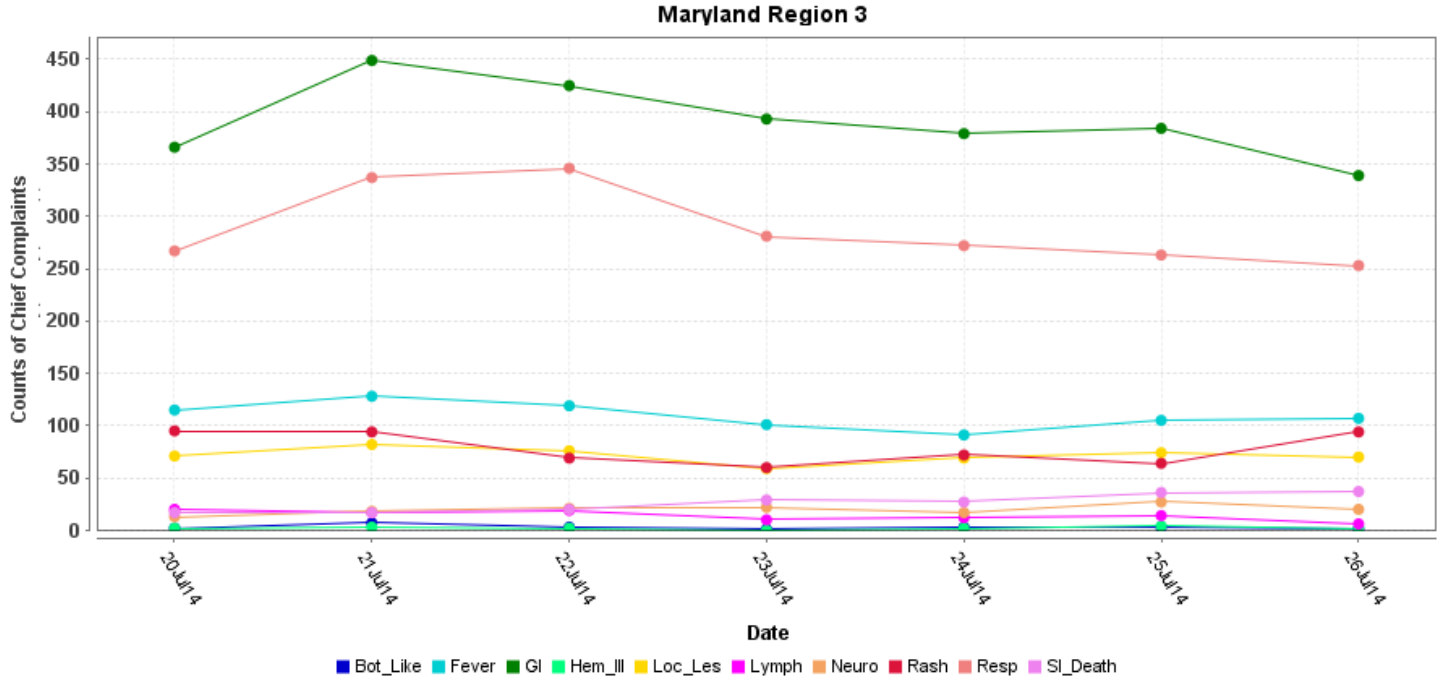


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

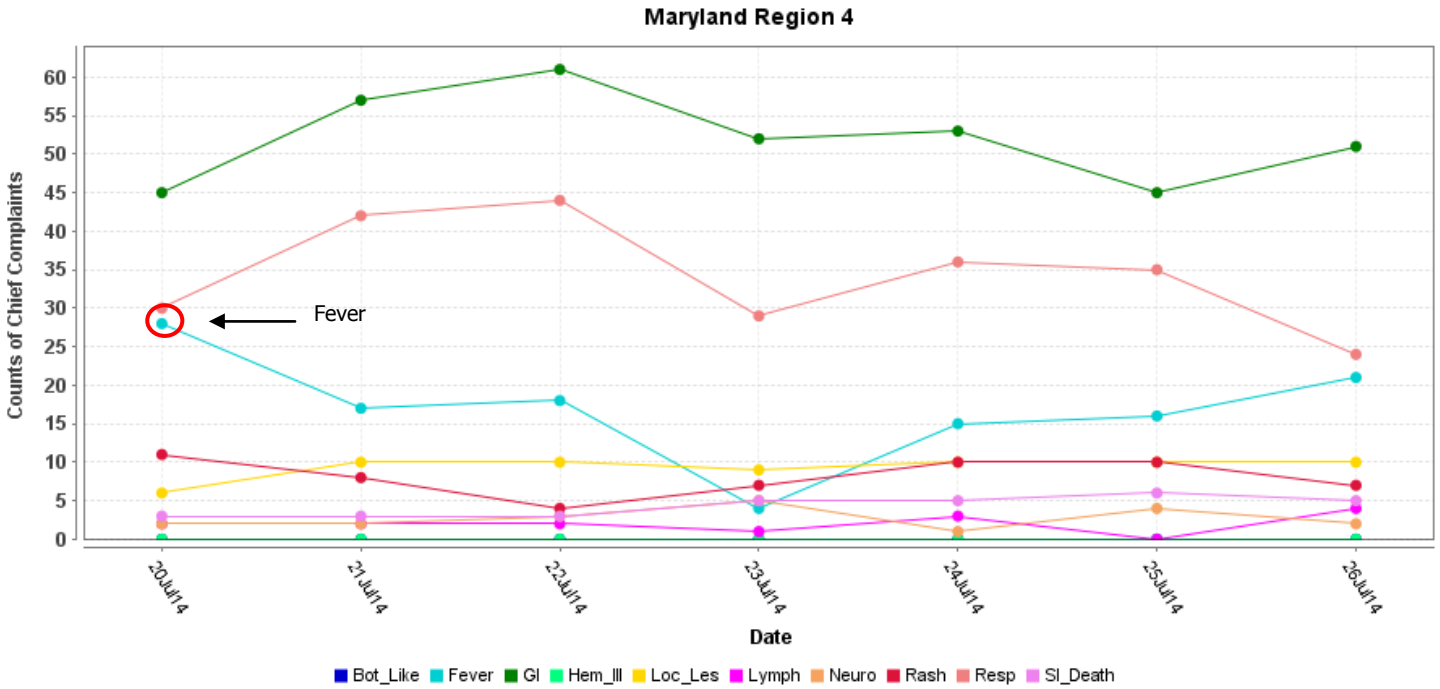
MARYLAND ESSENCE:



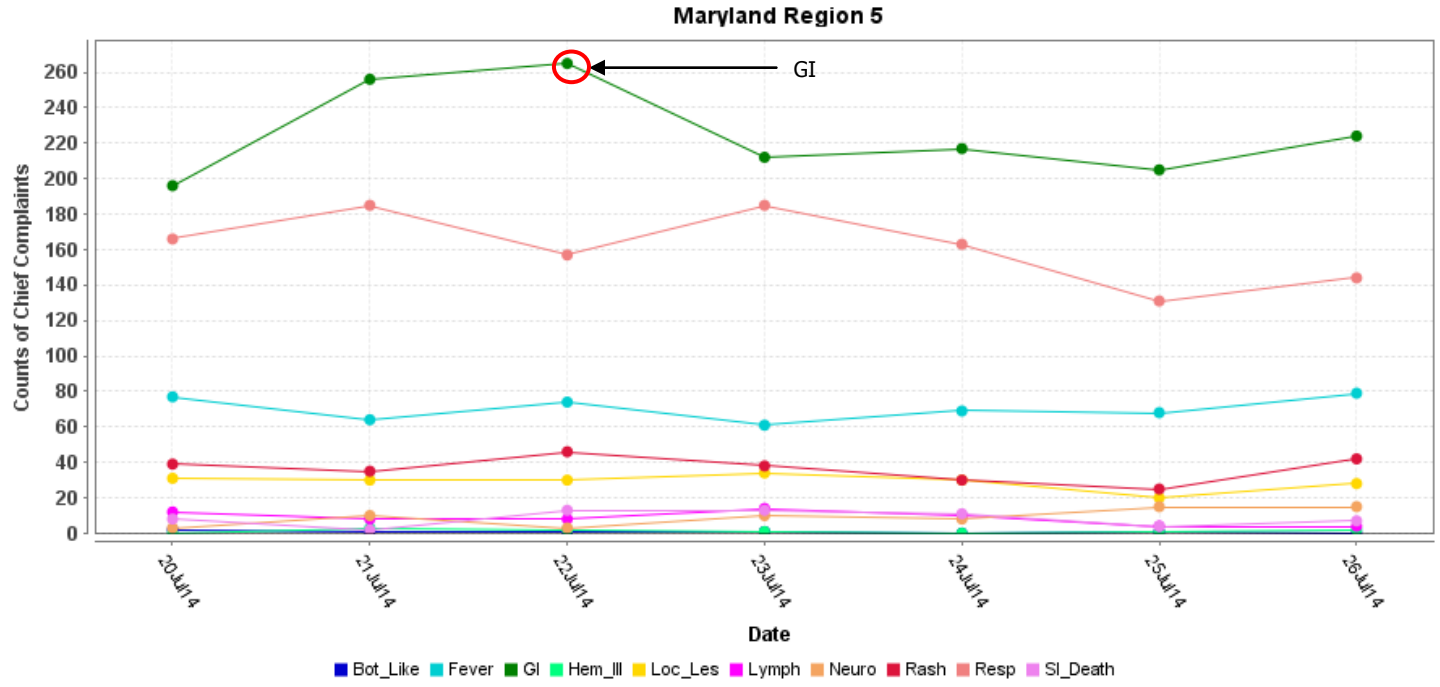
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE

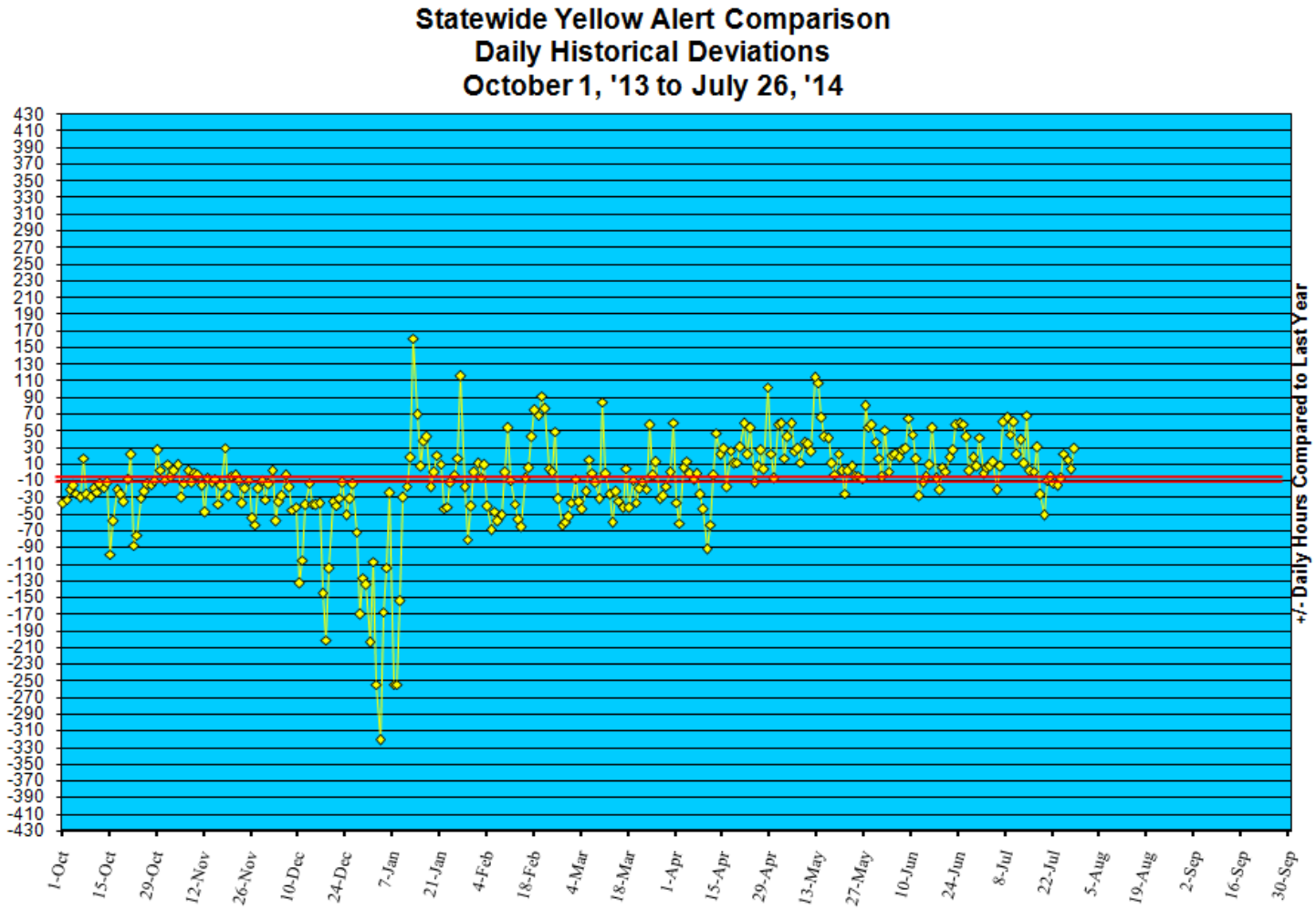


* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION



YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (July 20 - July 26, 2014):	3	0
Prior week (July 13 - July 19, 2014):	8	0
Week#29, 2013 (July 21 - July 27, 2013):	10	0

7 outbreaks were reported to DHMH during MMWR week 30 (July 20-26, 2014).

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS associated with a School

2 Foodborne outbreak s
2 outbreaks of GASTROENTERITIS/FOODBORNE associated with Restaurants

2 Respiratory illness outbreaks
1 outbreak of ILI in a Nursing Home
1 outbreak of PNEUMONIA in a Nursing Home

2 Rash illness outbreaks
2 outbreaks of HAND, FOOT, and MOUTH DISEASE associated with Daycare Centers

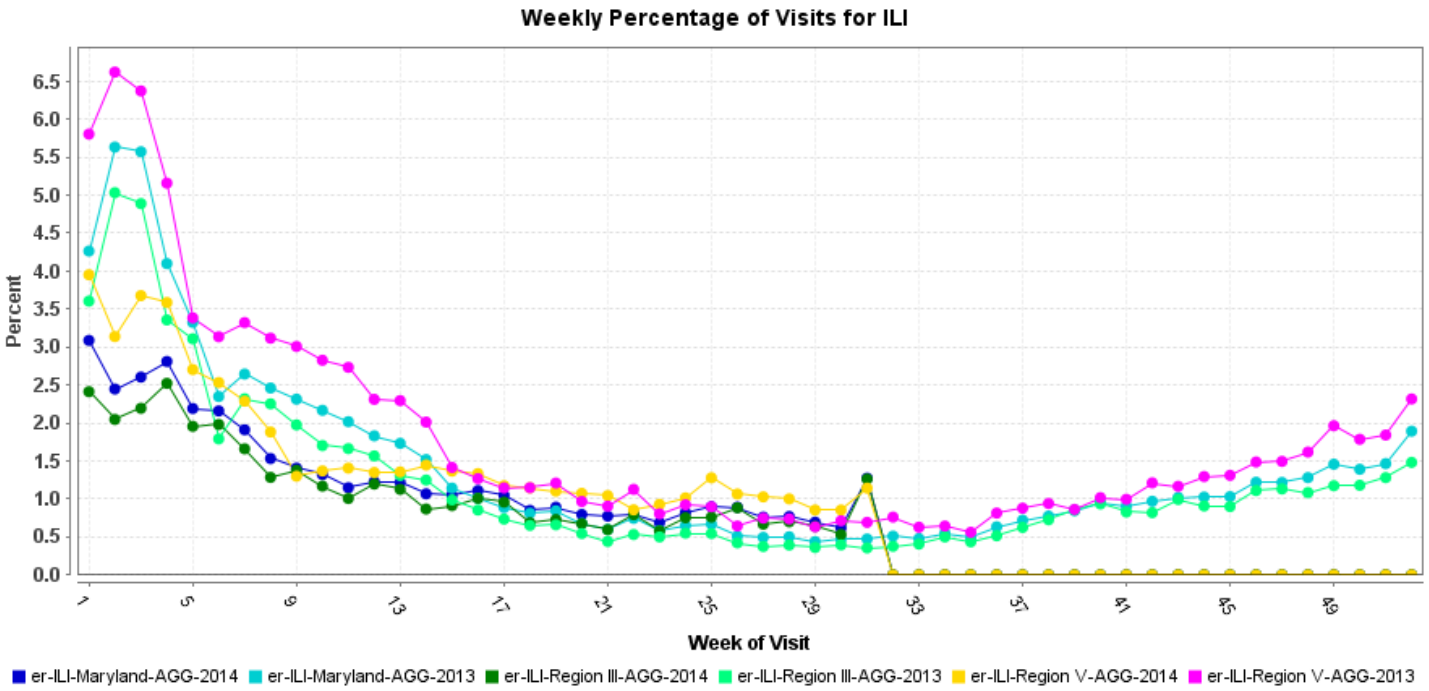
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

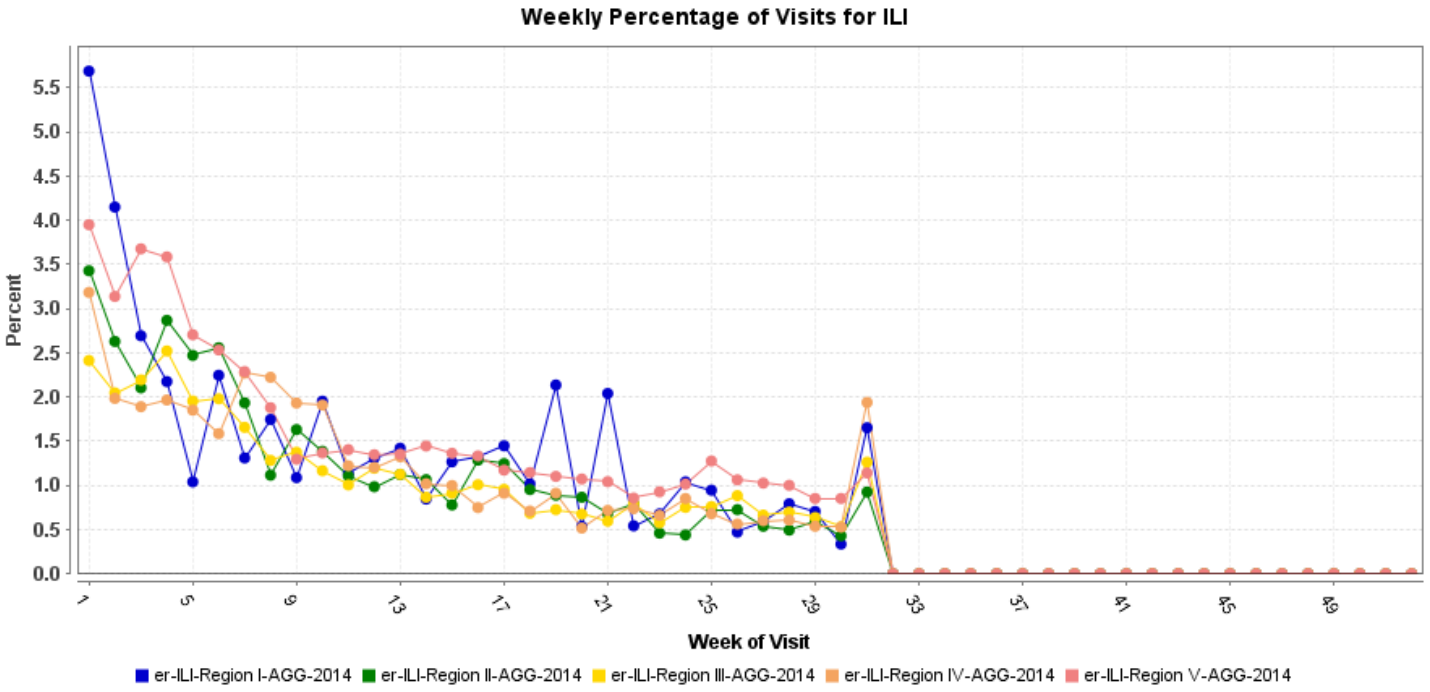
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



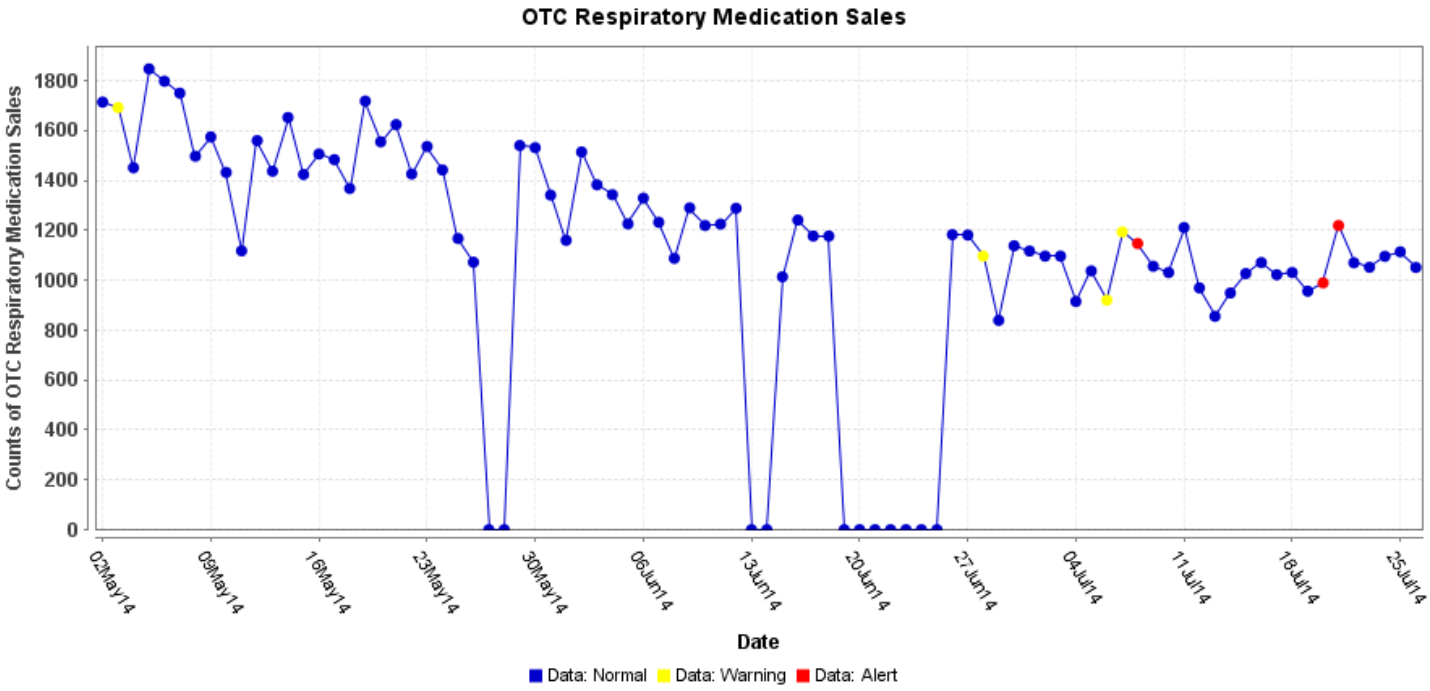
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

HANTAVIRUS (COLORADO): 23 July 2014, The Mesa County [Colorado] Health Department reported a confirmed case of [a] hantavirus [infection] in a county resident. The resident was taken to Denver for treatment over the weekend and was still being treated there on Monday [21 Jul 2014]. [Sin Nombre] hantavirus, which can be deadly, is carried primarily by deer mice [Peromyscus maniculatus]. The infected rodents excrete the virus in their urine, droppings and saliva. People are infected by inhaling airborne particles of the virus or by direct contact with rodents, their droppings or nests. Health officials say the case is a good reminder to residents to try to avoid exposure to hantavirus[es] by taking precautions while cleaning homes, sheds, cabins, barns or other areas where mice or mouse droppings are present. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI (MINNESOTA): 23 Jul 2014, At least 22 people on the Fond du Lac Reservation experienced foodborne illness linked to Escherichia coli, a spokesperson with the Minnesota Department of Health said on Wednesday 23 Jul 2014. The strain is believed to be E. coli O157, commonly associated with ground beef, said the spokesperson. The strain that prompted Applebee's restaurants to adjust its Minnesota menus earlier this month [July 2014] was E. coli O111, the spokesperson said as a way of comparison. The restaurant chain voluntarily changed a supplier as well as removed its Oriental chicken salad and other nuts and leafy vegetables from its Minnesota menus in that instance. Health department spokesman Doug Schultz said the 15 people reported ill in that case was "probably the tip of the iceberg." Schultz explained that Minnesota is a "real-time investigation" state, placing it at the forefront of reactions to foodborne illness. The goal of a real-time investigation is to arrest the spread of illness by pulling potentially contaminated fare, rather than other states, which conduct follow-up investigations. A state epidemiologist is leading the Fond du Lac investigation with help from an environmental health supervisor, as well as University of Minnesota graduate epidemiology students, who are making calls to people who were sick. "We're still interviewing and the numbers could change," Schultz said. Schultz said the Fond du Lac Reservation's assumption that its spate of outdoor gatherings, including powwows, an elder picnic and outdoor meetings, contributed to the outbreak was a fair one. Health department research shows that catered events, such as weddings, parties and potlucks "are notorious for being places where transmission occurs." Fond du Lac officials urged residents to purge any leftovers after the start of the investigation. The 1st report of illness on the Fond du Lac Reservation was 17 Jul 2014, Schultz said. Hospitals are mandated to report cases of suspected foodborne illness, and that is what elicited the current investigation. Regarding the cause, Schultz said the health department is not giving up. "We're always optimistic," he said. "We've got some of the best investigators in the country working on it." (Food safety threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect cases

Q FEVER (OREGON): 24 Jul 2014, According to Frank Moore, Linn County public health director, 4 cases of acute Q fever have been identified in Linn and Benton counties since May [2014]. In Linn County, the infection appears to be in the Harrisburg area. In each county, one case is confirmed and the other is presumptive, Moore said. "They are 45 miles [72.4 km] apart, so they aren't related," Moore said. "We have to emphasize that the general public is not at risk, but people should be diligent about washing their hands, just like we advise during flu season." Moore said that usually there are only 3 to 5 cases statewide in a year. "Therefore, these cases represent an unusually high number in a short period of time for this geographic area," he said. "We are requesting the public's help identifying and reporting additional cases." Moore said Q fever is found in cattle, sheep, and goats and it is spread through milk, urine, and feces. The number of organisms is unusually high during birthing in the amniotic fluids and placentas of animals, especially sheep. Especially at risk are farmers, ranchers, livestock shearers, stockyard workers, animal transporters, and laboratory workers as well as veterinary staffers. Infection of humans usually occurs due to inhalation of organisms attached to barnyard dust or dried fluids. The incubation period is from 14 to 22 days. Symptoms include: high fever; severe headache; general malaise, myalgia, chills or sweats, non-productive cough; nausea, vomiting, diarrhea; abdominal pain, chest pain. According to the Centers for Disease Control, if untreated, the fever can last from 9 to 14 days and from 30 to 50 per cent of patients develop pneumonia. Although most people recover from acute Q fever, there have been instances in which the condition has led to inflammation of the heart tissue or hepatitis. It can cause pre-term delivery or miscarriages in pregnant women. Health officials encourage anyone who works with livestock to appropriately dispose of animal placentas, birth products, fetal membranes, especially of sheep and goats. They should restrict access to barns and laboratories used in housing potentially infected animals. The public should use only pasteurized milk and milk products. Take extra caution when washing laboratory clothing. Quarantine imported animals. Ensure that holding facilities for sheep be located away from populated areas.. (Q Fever is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect and suspect cases

INTERNATIONAL DISEASE REPORTS*

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN): 22 Jul 2014, Last week, 3 patients from Afghanistan suspected to be suffering from Congo fever were admitted to the hospital. The National Institute of Health (NIH), Islamabad on Monday [21 Jul 2014] confirmed that one of them, age 15, tested positive for the virus, while the results of a man, age 55, and another man are still awaited. HMC [Hayatabad Medical Complex] spokesperson on infectious diseases, Dr Wali Rehman said 12 patients suffering from the virus have been brought to HMC so far this year [2014], of whom 6 have died. He said it takes up to 15 days for the results of the blood tests to arrive from NIH. Dr Rehman said personal protection equipment has been provided to the hospital staff, and no one is allowed to visit the isolation wards without gowns, gloves and masks. He added that 4 private rooms at HMC have been

declared isolation units for [Crimean-] Congo patients and that any individual brought to the casualty department with the symptoms will be directly admitted to the isolation ward. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect and suspect cases

EBOLA (GUINEA, LIBERIA, SIERRA LEONE): 25 Jul 2014, New cases and deaths attributable to EVD continue to be reported by the ministries of health in the 3 West African countries of Guinea, Liberia, and Sierra Leone. Between 21-23 Jul 2014, 108 new cases of EVD, including 12 deaths, were reported from the 3 countries as follows: Guinea, 12 new cases and 5 deaths; Liberia, 25 new cases with 2 deaths; Sierra Leone, 71 new cases and 5 deaths. These numbers include laboratory-confirmed, probable, and suspect cases and deaths of EVD.As of 23 Jul 2014, the cumulative number of cases attributed to EVD in the 3 countries stands at 1201, including 672 deaths. The distribution and classification of the cases are as follows: Guinea, 427 cases (311 confirmed, 99 probable, and 17 suspected) and 319 deaths (208 confirmed, 99 probable, and 12 suspected); Liberia, 249 cases (84 confirmed, 84 probable, and 81 suspected) and 129 deaths (60 confirmed, 50 probable, and 19 suspected); Sierra Leone, 525 cases (419 confirmed, 56 probable, and 50 suspected) and 224 deaths (188 confirmed, 33 probable, and 3 suspected). The World Health Organization (WHO) continues to monitor the evolution of the Ebola virus disease (EVD) outbreak in Sierra Leone, Liberia, and Guinea. The Ebola epidemic trend remains precarious, with community and health-facility transmissions of infection still taking place. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect cases

ANTHRAX (INDIA): 25 Jul 2014, One JL died of anthrax in Khadagpur village under Nandapur block [Koraput district, Odisha] on Wednesday [23 Jul 2014]. After consuming partially cooked meat at a feast in the village, he had taken ill. As JL did not take the help of doctors, his condition deteriorated. Later, he was found to be suffering from anthrax by ICDS [Integrated Child Development Services] staff who shifted him to Koraput Hospital where he succumbed. Meanwhile, a team of doctors rushed to the village and provided medicines to eight other villagers who had also taken the meat in the feast. Additional district medical officer Arun Padhi said a team of doctors is monitoring the situation. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable